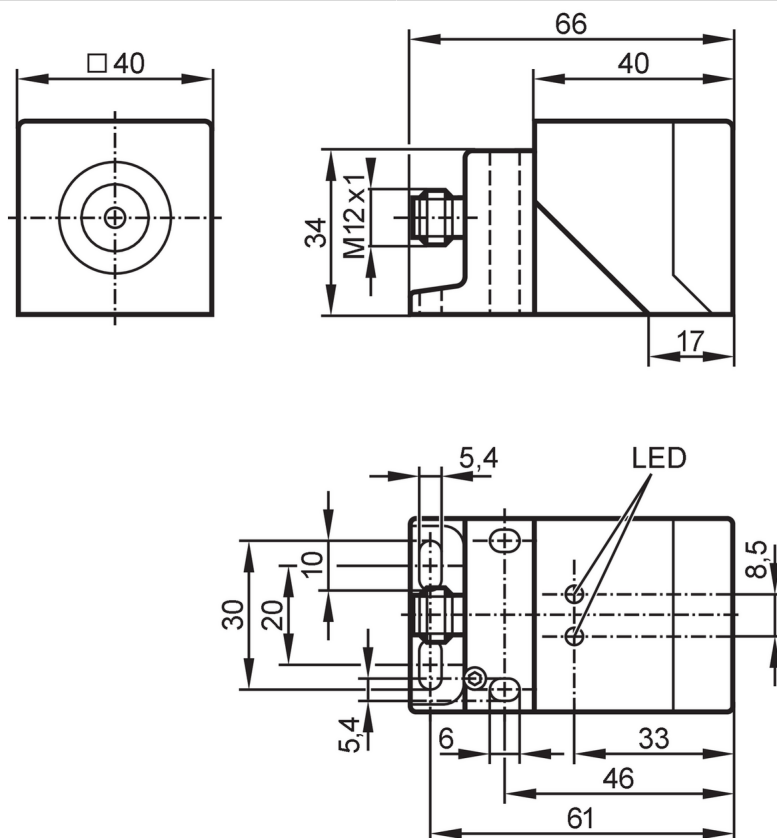


GM705S

Fail-safe inductive sensor

GIMC-4045-US/2OSSD



Product characteristics

Electrical design	PNP
Output function	2 x OSSD (A1 and A2)
Enable zone [mm]	4...20
Housing	rectangular
Dimensions [mm]	40 x 40 x 66

Application

Special feature	gold-plated contacts
Type of operation	continuous operation (maintenance-free)
Safety-related sub-function	safe state when properly undamped
Application	Industrial applications

Electrical data

Operating voltage [V]	19.2...30 DC
Rated insulation voltage [V]	30
Current consumption [mA]	< 30
Protection class	III
Reverse polarity protection	yes
Max. power-on delay time [ms]	5000

Outputs

Electrical design	PNP
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GM705S



Fail-safe inductive sensor

GIMC-4045-US/2OSSD

Output function	2 x OSSD (A1 and A2)
Max. voltage drop switching output DC [V]	2.5; (100 mA)
Output data	Interface type C class 0
Output voltage at 24 V	compatible with EN 61131-2 inputs type 1, 2, 3
Short-circuit protection	yes
Max. capacitive load CL_max [nF]	20

Monitoring range

Enable zone [mm]	4...20
Safe switching-off distance s(ar) [mm]	45

Reaction times

Response time to safety request [ms]	50
Response time when approaching the enable zone [ms]	200
Risk time (response time for safety-related faults) [ms]	100

Operating conditions

Applications	Class C to EN 60654-1 weatherproof application
Ambient temperature [°C]	-25...60
Note on ambient temperature	operational life ≤ 87600 h
Ambient temperature [°C]	10...40
Note on ambient temperature	operational life ≤ 175200 h
Rate of temperature change [K/min]	0.5
Max. relative air humidity [%]	briefly: 5...95 %; permanent: 5...70 %
Air pressure [kPa]	80...106
Max. height above sea level [m]	2000
Ionizing radiation	not permissible
Salt spray	no
Protection	IP 65; IP 67

Tests / approvals

EMC	IEC 60947-5-2	
	IEC 60947-5-3	
	EN 60947-5-3	
	EN 61000-4-2 ESD	6 kV CD / 8 kV AD
	EN 61000-4-3 HF radiated	20 V/m
	EN 61000-4-4 Burst	2 kV
	EN 61000-4-6 HF conducted	10 V
	EN 61000-4-8	30 A/m
	EN 55011	class B
Shock resistance	IEC 60947-5-2	
Vibration resistance	IEC 60947-5-2	

Safety classification

Complies with the requirements	ISO 13849-1: 2015 Category 3, PL e
	IEC 61508 SIL 3
	IEC 62061 SIL 3

GM705S



Fail-safe inductive sensor

GIMC-4045-US/2OSSD

Mission time TM	[h]	≤ 175200
Mission time TM (additional indication)		20 years
PFH	[1/h]	1E-08

Mechanical data		
Weight	[g]	355
Housing		rectangular
Mounting		non-flush mountable
Dimensions	[mm]	40 x 40 x 66
Material		PPE; diecast zinc

Displays / operating elements		
Display	Power	1 x LED, green
	signal	1 x LED, yellow

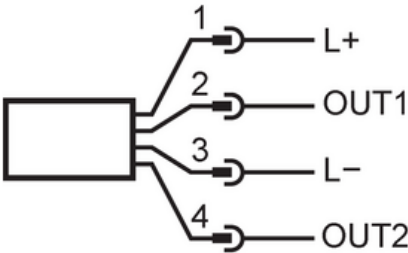
Remarks		
Remarks	Unless stated otherwise, all data refer to the reference target plate to IEC 60947-5-2 over the whole temperature range. (FE360 = ST37K) 60x60x1 mm	
Pack quantity	1 pcs.	

Electrical connection - plug

Connector: 1 x M12; coding: A; Contacts: 4, gold-plated



Connection



1	L+	
2	OUT1	OSSD1
3	L-	
4	OUT2	OSSD2
OUT: Output		